



ATTORNEY DOCKET NO. 14114.0325U2

SEQUENCE LISTING

<110> Rosely M. Zancope-Oliveira  
Timothy J. Lott  
Leonard W. Mayer  
Errol Reiss  
George S. Deepe

<120> NUCLEIC ACIDS OF THE M ANTIGEN GENE OF  
*HISTOPLASMA CAPSULATUM*, ANTIGENS, VACCINES AND ANTIBODIES,  
METHODS AND KITS FOR DETECTING HISTOPLASMOSIS

<130> 14114.0325U2

<140> 09/674,195

<141> 2000-10-26

<150> PCT/US99/09151

<151> 1999-04-27

<150> 60/083,676

<151> 1998-04-30

<160> 20

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 3862

<212> DNA

<213> *Histoplasma capsulatum*

<220>

<221> misc\_feature

<222> 3258

<223> n = g, a, c or t(u)

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 <212> PRT  
 <213> Histoplasma capsulatum

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 35 40 45  
 Ser Leu Lys Ala Gly Asn Arg Gly Pro Thr Leu Leu Glu Asp Phe Ile  
 50 55 60  
 Phe Arg Gln Lys Ile Gln His Phe Asp His Glu Arg Val Pro Glu Arg  
 65 70 75 80  
 Ala Val His Ala Arg Gly Ala Gly Ala His Gly Val Phe Thr Ser Tyr  
 85 90 95  
 Asn Asn Trp Ser Asn Ile Thr Ala Ala Ser Phe Leu Asn Ala Ala Gly  
 100 105 110  
 Lys Gln Thr Pro Val Phe Val Arg Phe Ser Thr Val Ala Gly Ser Arg  
 115 120 125  
 Gly Ser Val Asp Ser Ala Arg Asp Ile His Gly Phe Ala Thr Arg Leu  
 130 135 140  
 Tyr Thr Asp Glu Gly Asn Phe Asp Ile Val Gly Asn Asn Val Pro Val  
 145 150 155 160  
 Phe Phe Ile Gln Asp Ala Ile Gln Phe Pro Asp Leu Ile His Ala Val  
 165 170 175  
 Lys Pro Gln Pro Asp Ser Glu Ile Pro Gln Ala Ala Thr Ala His Asp  
 180 185 190  
 Thr Ala Trp Asp Phe Leu Ser Gln Gln Pro Ser Ser Leu His Ala Leu  
 195 200 205  
 Phe Trp Ala Met Ser Gly His Gly Ile Pro Arg Ser Met Arg His Val  
 210 215 220  
 Asp Gly Trp Gly Val His Thr Phe Arg Leu Val Thr Asp Glu Gly Asn  
 225 230 235 240  
 Ser Thr Leu Val Lys Phe Arg Trp Lys Thr Leu Gln Gly Arg Ala Gly  
 245 250 255  
 Leu Val Trp Glu Glu Ala Gln Ala Leu Gly Gly Lys Asn Pro Asp Phe  
 260 265 270  
 His Arg Gln Asp Leu Trp Asp Ala Ile Glu Ser Gly Arg Tyr Pro Glu  
 275 280 285  
 Trp Glu Leu Gly Phe Gln Leu Val Asn Glu Ala Asp Gln Ser Lys Phe  
 290 295 300  
 Asp Phe Asp Leu Leu Asp Pro Thr Lys Ile Ile Pro Glu Glu Leu Val  
 305 310 315 320  
 Pro Phe Thr Pro Ile Gly Lys Met Val Leu Asn Arg Asn Pro Lys Ser  
 325 330 335  
 Tyr Phe Ala Glu Thr Glu Gln Ile Met Phe Gln Pro Gly His Val Val  
 340 345 350  
 Arg Gly Ile Asp Phe Thr Asp Asp Pro Leu Leu Gln Gly Arg Leu Tyr  
 355 360 365

Ser Tyr Leu Asp Thr Gln Leu Asn Arg His Gly Gly Pro Asn Phe Glu  
 370 375 380  
 Gln Leu Pro Ile Asn Arg Pro Arg Ile Pro Phe His Asn Asn Asn Arg  
 385 390 395 400  
 Asp Gly Ala Gly Gln Met Phe Ile Pro Leu Asn Thr Ala Ala Tyr Thr  
 405 410 415  
 Pro Asn Ser Met Ser Asn Gly Phe Pro Gln Gln Ala Asn Arg Thr His  
 420 425 430  
 Asn Arg Gly Phe Phe Thr Ala Pro Gly Arg Met Val Asn Gly Pro Leu  
 435 440 445  
 Val Arg Glu Leu Ser Pro Ser Phe Asn Asp Val Trp Ser Gln Pro Arg  
 450 455 460  
 Leu Phe Tyr Asn Ser Leu Thr Val Phe Glu Lys Gln Phe Leu Val Asn  
 465 470 475 480  
 Ala Met Arg Phe Glu Asn Ser His Val Arg Ser Glu Thr Val Arg Lys  
 485 490 495  
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 500 505 510  
 Val Ala Leu Ala Ile Gly Val Glu Pro Pro Ser Pro Asp Pro Thr Phe  
 515 520 525  
 Tyr His Asn Lys Ala Thr Val Pro Ile Gly Thr Phe Gly Thr Asn Leu  
 530 535 540  
 Leu Arg Leu Asp Gly Leu Lys Ile Ala Leu Leu Thr Arg Asp Asp Gly  
 545 550 555 560  
 Ser Phe Thr Ile Ala Glu Gln Leu Arg Ala Ala Phe Asn Ser Ala Asn  
 565 570 575  
 Asn Lys Val Asp Ile Val Leu Val Gly Ser Ser Leu Asp Pro Gln Arg  
 580 585 590  
 Gly Val Asn Met Thr Tyr Ser Gly Ala Asp Gly Ser Ile Phe Asp Ala  
 595 600 605  
 Val Ile Val Val Gly Gly Leu Leu Thr Ser Ala Ser Thr Gln Tyr Pro  
 610 615 620  
 Arg Gly Arg Pro Leu Arg Ile Ile Thr Asp Ala Tyr Ala Tyr Gly Lys  
 625 630 635 640  
 Pro Val Gly Ala Val Gly Asp Gly Ser Asn Glu Ala Leu Arg Asp Val  
 645 650 655  
 Leu Met Ala Ala Gly Gly Asp Ala Ser Asn Gly Leu Asp Gln Pro Gly  
 660 665 670  
 Val Tyr Ile Ser Asn Asp Val Ser Glu Ala Tyr Val Arg Ser Val Leu  
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<210> 4  
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<210> 7  
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<210> 8  
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<223> d = g, a or t(u)

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<220>  
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27

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Synthetic Construct

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41



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23

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23